PORTABLE REFRACTOMETER OPERATING INSTRUCTIONS

SERIES

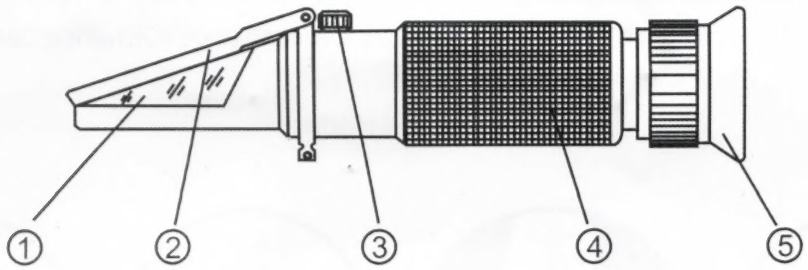
STYLE	MODEL ORD/ATC	MEASURING RANGE	RESOLUTION	SIZE□×L ORD/ATC	WEIGHT ORD/ATC
Salinity	FG-201/211	0~100‰	1‰	29×160mm	175g
	FG-202/212	0~28%	0.2%	29×160mm	175g
Brix/ Salinity	FG-203/213	0~12% Brix 0~100‰ Salt	0.1% 1‰	29×160mm	175g
	FG-204/214	0~32% Brix 0~28% Salt	0.2% 0.2%	29×160mm	175g

ORDinary: If the condition temperature isn't 20℃, it need to adjust the zero for the measuring accuracy.

ATC(Automatic Temperature Compensation): The ATC device is a built-in type. Its compensation temperature range: 10℃~30℃.

NAME OF COMPONENTS

1.Prism 2.Cover plate 3.Correct screw 4.Mirror tube 5.Eyepiece(Adjusting ring of diopter)



APPLICATION

FG201/211, FG202/212 were developed for measuring of salt in sea water and prepared food solution etc.

FG203/213, FG204/214 were developed for most general purpose work, These can measure Brix content and salt content.

METHOD OF OPERATION

1. Aim the front end of the refractometer to the direction of bright light, and adjust the adjusting ring of diopter(5) until the reticle can be seen clearly.

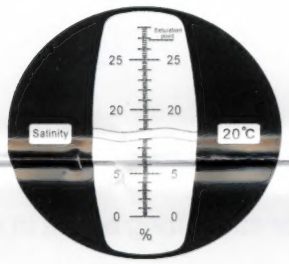
2. Adjustment of null
   Open the cover plate(2), drop one or two drops of pure distilled water on the surface of the prism. Close the cover plate and press it lightly, then adjust the correct screw(3) to make the light/dark boundary coincide with the water line.
3. Open the cover plate(2) and clean the water on the prism and cover plate by soft cotton flannel, then drop one or two drops of the serum(plasma). Close the cover plate and press it lightly, the corresponding dial reading on the light/dark boundary is the concentration of albumen.
4. After measurement, clean away the adherent on the surface of prism and cover plate by moist gauze. After drying, is should be stored perfectly.

ATTENTIONS AND MAINTENANCE

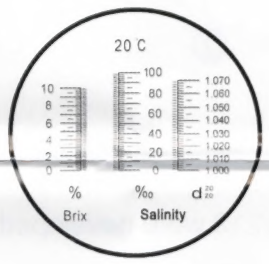
1. Adjusting the null liquid and specimen should be under the same temperature, if the temperature varied greatly, the null point should be adjusted once per 30 minutes.
2. The prism must be cleaned completely, because any residual impurity on it could cause error during measuring.
3. After usage, don't use water to wash the instrument, so as to avoid water entering into the pipe of the instrument.
4. As it is a kind of precision optical instrument, you should hand it gently and take good care of it, don't touch and scratch the optical surfaces. It should be kept in the environment of dry, clean and non-corrosiveness air, so as to prevent the surface of it turning mouldy and foggy. Please avoid strong shock during transportation.
5. If the consumers use the instrument in accordance with the mentioned method of usage, it guarantee that instrument can't break down, the optical performance can't change.

DIALS

FG-201/211



FG-202/212



FG-203/213

FG-204/214

ACCESSORY:

1. Plastic pipette 2 2. Screw driver 1 3. Cotton flannel 1